

## ABSTRACT

Disclosed is a wavemeter (50) for determining a wavelength of an incoming optical beam (100). The wavemeter comprises a coarse-measuring unit (130) determining in a first wavelength range a first wavelength value as representing the wavelength of the incoming optical beam, and a fine-measuring unit (200) providing a wavelength determination for the incoming optical beam that is ambiguous within the first wavelength range but unambiguous in each of a plurality of unambiguous wavelength ranges, so that a plurality of different wavelength values correspond to a measuring value as measured by the fine-measuring unit for the incoming optical beam. The wavemeter further comprises an evaluation unit (350) for determining a second wavelength range as the one of the plurality of unambiguous wavelength ranges that covers the first wavelength value, and for determining a second wavelength value as the one of the plurality of different wavelength values that corresponds to the measuring value in the second wavelength range. The second wavelength value is output as measuring result of the wavemeter representing the wavelength of the incoming optical beam.

[Fig. 1 for publication]